

Claims

- 1) An electronic device of compact design and construction characterized in that the above device collects, processes and transmits data
5 from a specific area, which it supervises, to an information collection system, located at a long distance from the supervised area. The device in concern comprises a microprocessor, and sensors connected to it and is pertained by the integration on the same electronic printed circuit of the microprocessor with the sensors logical circuits, the reduction of the circuit
10 dimensions and its compact construction structure.
- 2) An electronic device as claimed in claim 1 characterized in that it integrates the logic circuits of the sensors on the main printed circuit board (PCB), whereas the sensors are external and connected with the PCB logic
15 circuits.
- 3) An electronic device as claimed in claim 1, characterized in that it integrates on the same electronic printed circuit of the following additional sub-circuits: a) data input to the microprocessor, b) power supply and c)
20 data output.
- 4) An electronic device as claimed in claims 1 and 2, characterized in that it contains a combination of some or all the above integrated logical circuits of the following sensors: a) supervision and status indication of the
25 power network phases R, S, T and the possibility of «AND» or «OR» signaling, b) temperature monitoring and indication, c) water level monitoring and indication, d) smoke detection and indication, e) open door monitoring and indication, f) redundant power supply battery voltage monitoring and indication; g) intruder monitoring and indication.

5) An electronic device as claimed in any of the above claims characterized in that it integrates on the electronic printed circuit of two or more additional independent relay circuits serving the signaling needs.

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6) An electronic device as claimed in any of the above claims characterized in that it is designed for use in the antenna shelters.

7) An electronic device as claimed in claim 5 characterized in that it is
10 designed for use in the antenna shelters of mobile telephony (GSM operators) (outdoor shelter).

8) An electronic device as claimed in any of the above claims characterized in that the electronic printed circuit is placed in a case
15 consisting of a base, with four side walls and a detachable cover and is made of a material (e.g. metal) providing safety to the staff, protection from environmental elements and electromagnetic shielding from and to the environment.

20 9) An electronic device as claimed in claim 7 characterized in that it contains in its case of the following:

a) openings at the sidewalls to allow passage and mounting of the circuits connecting cables at the internal part of the case with external peripheral devices.

25 b) metallic supports for mounting the electronic printed circuit on the receptacle base.

c) metallic duct in the case base for driving and protection of the power cable.

d) grounding posts for electromagnetic and safety grounding.

- e) a grounding post on the detachable cover, connected with the grounding of the main body for complete electromagnetic shielding and safety.
 - f) a special metallic base for battery mounting and support.
 - g) points of support of the transformer.
 - 5 h) metal strips welded on the external surface of the main body of the case base (290X76 mm) with openings for side mounting of the device in racks.
- 10) An electronic device as claimed in claims 7 and 8 characterized in that the case is secured with an anti-tamper switch on the detachable cover,
- 10 which signals a corresponding illegal tamper alarm if the case is opened by non authorized personnel.